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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,329	07/02/2003	Robert J. Telep	DKT 02110A (BW1-00080)	3816
7590 11/10/2005			EXAMINER	
BORGWARNER INC. PATENT ADMINISTRATOR 3850 HAMLIN ROAD AUBURN HILLS,, MI 48326-2872			BASTIANELLI, JOHN	
			ART UNIT	PAPER NUMBER
			3751	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,329

Applicant(s)

TELEP ET AL.

Examiner

John Bastianelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 25-29 is/are allowed.
6) ☒ Claim(s) 1-10 and 30-34 is/are rejected.
7) ☒ Claim(s) 11-24 and 35-37 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/17/03.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. The restriction of July 1, 2005 is withdrawn.

Claim Objections

2. Claims 4, 6 and 30 are objected to because of the following informalities: In claim 4, it should be "said at least one valve member". In claim 6, "said member" should be "said engagement member". In claim 30, "providing a valve shaft" is mentioned twice. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10 and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Heritier-Best WO99/31372.

Heritier-Best discloses a vehicle gaseous fluid metering device (Fig. 1) having a housing 8, adapted for routing of gas from an input passage to an output passage (Fig. 1); a valve assembly positioned inside said housing for selectively moving gas from said input passage to said output passage, said valve assembly including at least one valve seat 7 acting as an opening between said input passage and said output passage, and at least one valve member 3 operative with said

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valve seat and acting as a moveable barrier between said input passage and said output passage, wherein said valve member moves between a closed position and an open position, a valve shaft 13 connected to said at least one valve member, said valve shaft is operable for moving said at least one valve member in response to rotation of said valve shaft; and an actuator operable for rotating said valve shaft causing corresponding axial movement of said at least one valve member. The valve member radially rotates against the valve seat to self-clean the valve member and valve seat by shearing and is seen to rotate greater than 0 degrees to about 90 degrees prior to axial movement of the valve member. The valve is seen to rotate over a range of 45 to 120 degrees over the range of axial motion. An engagement member 12 seen as a pin extends from the valve shaft and engages a first ramped surface is a first slot 11 in a wall 10a and 10b of the housing. The first slot is progressively angled from a first angle to a second angle (seen as the same angle).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Alternatively, claims 4-5 and 9-10 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Heritier-Best WO99/31372.

Heritier-Best lacks a mention of specific angles. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the valve member rotate

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greater than 0 to 90 degrees prior to axial movement and rotate 45 to 120 degrees over the range of axial motion as a matter of design choice in order to move the valve open and closed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first angle and the second angle the same such as 10 degrees as a matter of design choice to select 10 degrees as the proper opening angle of the valve.

7. Claims 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heritier-Best WO99/31372 in view of Okada et al. US 6,330,880.

Heritier-Best lacks a second valve member and second valve seat. Okada discloses a second valve member and a second valve seat. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a second valve seat as disclosed by Okada in order to provide more flow by having two passages.

Allowable Subject Matter

8. Claims 11-24, 35-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The primary reason for the allowance of claim 11 is the first and second angles being different. The primary reason for the allowance of claims 12-24 is the first and second angles being different

9. Claims 25-29 are allowed. The following is an examiner's statement of reasons for allowance: The primary reason for the allowance of the claims is the first and second valve members in combination with first and second gears and a motor.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Giacobbi and Sugden disclose valves with actuating members.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Bastianelli whose telephone number is (571) 272-4921. The examiner can normally be reached on M-F (9:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JB

November 4, 2005



John Bastianelli
Primary Examiner
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